A SUMMARY OF "ORGANIC CEREBRAL DYSFUNCTION WITH PARTICULAR EMPHASIS ON THE BEHAVIOURAL CHANGES AND PSYCHIATRIC SYMPTOMS SHOWN BY THE PATIENT TOGETHER WITH THE TREATMENT OF THESE SYMPTOMS".

From a talk given at the Post-Graduate Seminar of The Western Australian Association of Occupational Therapists, by

G. MILNER, M.B., Ch.B., M.A.N.Z.C.P., D.P.M.

Summary by V. Sweet, Dip.O.T.

Old age and the problems associated with it is seen by Dr. Milner as one of the greatest problems of the world today. For this reason his lecture was concentrated on the aging process, although many of the facts were true of other organic cerebral dysfunctions.

Definition of Aging: A continuous process beginning with death wherein the structures and functions of an immature organism, first become mature and then deteriorate. Deterioration begins early with some functions (for example, eyesight). However, the aging of many organs can be compensated (e.g. spectacles may be defined as optical instruments for the improvement of visual acuity).

Of all our organs, the brain is the most complex, most important and most efficient. While one can adjust to a stiff shoulder or even the loss of a limb, it is much harder to adjust to the loss of part of the brain.

The concept of cybernetics is the scientific study of messages and of the regulatory or control mechanisms, especially those involving feedback, whether found in machines, persons, social groups or institutions. This is especially relevant to the study of brain disorders.

The common distinction between functional and organic disorders is not an absolute one. The characteristic symptom complexes of the functional group are not exclusive to that group (e.g. often a maniac, depressive or schizophrenic component colours the clinical picture).

The problem of aging is increasing. There is an increasing proportion of people over the age of 60. In 1955 30% of the patients admitted to Psychiatric Hospitals were over the age of 65 and this is rising.

MAIN FEATURES OF ORGANIC CEREBRAL DYSFUNCTION :

1. **Clouding of Consciousness.**

There is a change in the level of awareness and this varies from a mild disturbance of grasp, through delirium to deep coma. Usually the first episodes of clouding of consciousness are short lived and may not be recognized.

2. **Dysmnesia** (disordered memory).

The clinical picture is variable.

Often there is a completely blank recollection for a period of confusion; there may be difficulty in remembering recent events, or there may be vague and faulty orientation. Distant events are usually well remembered. Confabulation is another way in which a memory disturbance manifests itself — this is the patient's way of trying to fill a void. The memory disorder may be so severe that knowledge of a bereavement, hemiplegia, etc., may not be retained. It is quite a common story that the hemiplegic patient often tries to throw out of the bed, "this other arm and leg, here in bed with me."

The disturbed brain often cannot form enduring new memories (engrammes), and this seems to be bound up with the emotional facility and decreased volition of the patient. Occupational Therapy and other forms of stimulated activity are required, lest the patient slip into a torpid, inert state. However, this difficulty in forming new memories has to be remembered when thinking of a specific activity for the patient.

3. **Dementia.**

This is defined as an irreversible decline of mental functions produced by organic disorder of the brain. There is an intellectual disintegration and feeling and striving are also affected. The pattern is varied according to pre-morbid personality, age of onset and nature of cause.

Some signs of dementia are :

— impairment of recent memory — patient suddenly begins to carry a note-book with him to help him remember trivial things,

— depressive states,

— the attention is roused and sustained with difficulty,

— the patient tires easily,

— a poverty of thought with rigidly held ideas and recurring memories of the past,

— emotions are at first labile, then become shallow and blunted,

— the reaction to all situations is one of fatuous, euphoric equinimity,

— judgment and self-control are impaired.

— personal habits deteriorate,

— there may be delusions arising from impaired memory, and loss of grasp of the situation — these are usually transient, unorganized such as fears of being robbed, deprived, influenced.

This fall-out of abilities is not the full clinical picture. Kurt Goldstein has shown that the personality of the brain injured patients struggles to overcome its defects and maintain its integrity by feedback mechanisms. It is helpful to study the general behaviour of the patient with organic cerebral disease as well as the intellectual development. The earliest symptoms of the disorder may be revealed in general behaviour, and it is here that we may most readily help the patient to improve feedback, help control their psychological and social functioning.

GENERAL BEHAVIOUR.

1. There may be a maniac, depressive or schizophrenic colouring to organic cerebral disease — this is probably due to a specific predisposition to psychotic disease.

2. Those changes in behaviour by which the patient attempts to overcome the defects. The rising pulse, restlessness, tears and incontinence which develops with the attempt to perform some activity, or with some stressful situation is called a "catastrophic reaction". The O.T. should be aware of this reaction and not push the patient too hard, too fast.

The patient tries to avoid any situation which will produce a catastrophic reaction by becoming solitary and withdrawn, or by busying themselves with purposeless over activity.

Organic orderliness, or the meticulous stereotyped disposal of the patient's possessions, is another common behavioural change, used to try and overcome the impairment of recent memory.

Brain damaged patients tend to suppress all knowledge of the disability. If the disability causes a complete loss of function the adjustment seems to be better than with only a partial loss of function.

There may be a rise in threshold of excitement, so that stronger stimuli are needed to arouse the patient. Quite strong stimulation is required in O.T. However, once excitation has occurred it tends to irradiate excessively and last abnormally long leading to purposeless activity and emotional responses. It may be seen that the O.T. has to avoid the emptiness of too little stimulation on one hand, but guard against over-stimulation on the other.

The brain damaged person also tends to be distractable rather than inattentive, and they lack ability to shift from abstract to concrete attitudes and generally lack facility in abstract attitude.

GENERAL MANAGEMENT.

Patients should be housed in cheerful, suitably planned surroundings and have an imaginatively conceived plan of rehabilitation. Many will be able to return home and others will at least be less unhappy.

The cardinal rule in treating the aged is to get them out of bed, so that details like handrails in the wards, armchairs (no polished floors or stairs), need to be considered.

Radio and T.V. help to maintain contact with the outside world. An active Occupational Therapy programme is important, and ward duties and encouragement to the more robust to help the frail aid them to think of others and improve their own health.

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